FOCUS SECTION
PUBLIC HEALTH

The term 'public health' is defined as "The science and art of preventing disease, prolonging life and promoting health and efficiency through organized community effort." This definition by Professor C.E.A. Winslow, a pioneer in public health advocacy in early 1920s, appeared in his article *The Untilled Fields of Public Health* in Science Magazine (1920). The mission of public health, "the fulfillment of society's interest in assuring the conditions in which people can be healthy," is explained in another work, *The Future of Public Health (1988).*

Since the beginning of the 20th century, the health and life expectancy of people in many countries of the world have improved dramatically. Control of epidemic diseases, safe food and water, and maternal and child health services are only a few of the public health achievements that have prevented countless deaths and improved the quality of life. The average lifespan has increased substantially and this gain is attributed to advances in public health.

Many of the major improvements in the health of the people have been accomplished through public health measures. Notable achievements have been the vaccines, which have resulted in the eradication of smallpox; the near elimination of poliomyelitis; and control of measles, rubella, tetanus, diphtheria, haemophilus influenzae, and other infectious diseases.

Severe injuries and deaths related to mining, manufacturing, construction, and transportation also have decreased. There have been improvements in motor-vehicle safety, work-related health problems, such as coal workers' pneumoconiosis (black lung), and silicosis have come under better control. According to some estimates, since 1980, safer workplaces have resulted in a reduction of approximately 40% in the rate of fatal occupational injuries.

While the public health initiatives of the 20th century – from sanitation and immunization to tobacco control – have been remarkably successful in enhancing the quantity and quality of lives, at the dawn of a new century, public health threats loom as large as ever – from HIV/AIDS, Ebola, West Nile virus, SARS, and avian influenza to the epidemic of obesity and the threat of bioterrorism. Also with the frequent and rapid transportation of people and disease vectors by air there has been a growing need for the monitoring of public health on a global level.

"In the developing world, health is very pragmatically related to development: if a significant part of the population is partially disabled by diseases such as malaria, or if whole professional classes are destroyed by the human immunodeficiency virus (HIV) and the acquired immune deficiency syndrome (AIDS), then this makes economic development much less efficient, which leads to unnecessary delay and environmental impact," writes Edward P. Richards in his paper *The Role of Medical and Public Health Services in Sustainable Development.*

The United Nations, governments, international and multilateral organizations have launched initiatives to address public health concerns. Agenda 21 expands the traditional

environmentalist focus on illnesses related to environmental pollution to a broad emphasis on basic medical care, preventive medicine, and the improvement of mental and physical health. Its opening paragraph states: "Health ultimately depends on the ability to manage successfully the interactions between the physical, spiritual, biological and economic/social environment. Social development is not possible without a healthy population; yet most development activities affect the environment to some degree which in turn causes or exacerbate many health problems." Chapter 6 of Agenda 21 "Protecting and Promoting Human Health," applies this approach to key populations and programs, delineating a detailed set of objectives for personal medical services, public health services, and environmental health issues.

The World Health Organization is taking lead in formulating and implementing policies and programs for better public health worldwide. Its broad definition of health parallels with the UN's agenda: "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

The statement of the Rio Declaration of 1992, "Human beings are at the centre of concern for sustainable development. They are entitled to healthy and productive life in harmony with nature," is reaffirmed in the Millennium Development Goals, which range from halving extreme poverty to putting all children into primary school and stemming the spread of infectious diseases such as HIV/AIDS. Three out of ten goals: reduce child mortality; improve maternal health; and combat major diseases are devo ted to improve public health.

In the United States, the Public Health Services division of the Department of Health and Human Services is the principal federal health agency. It consists of several other agencies such as Administration for Children and Families; Administration on Aging; Agency for Healthcare Research and Quality; Agency for Toxic Substances and Disease Registry; Centers for Disease Control and Prevention; Centers for Medicare & Medicaid Services; Food and Drug Administration; Health Resources and Services Administration; Indian Health Service; National Institutes of Health; Program Support Center; Substance Abuse and Mental Health Services Administration. To carry out all these activities, the public health services employ large numbers of physicians, dentists, veterinarians, laboratory technicians, nurses, sanitary engineers, health educators, psychologists, and social workers.

Public health involves many activities and functions. It includes a population-based approach versus a personal or individual health care model. An efficient model of public health has several unique features including a focus on prevention as a primary strategy for improving health and quality of life; a collective policy decision-making process that includes collaboration; and interventions and policies that are grounded in epidemiology, biostatistics, environmental science, management sciences, and behavioral and social sciences.

The articles included in this section explain the threat of various pandemic diseases, organized community efforts aimed at the prevention of disease and the promotion of health, activities undertaken by the government, and the associated efforts of private and voluntary organizations and individuals.

For additional information, a webliography is presented here for your use. However, the inclusion of Internet sites other than those of the U.S. government should not be construed

as an endorsement of the views contained therein. The websites are current as of date and are subject to change at any time.

Action on Smoking and Health
http://www.ash.org

Administration for Children and Families
http://www.acf.dhhs.gov/

Agency for Health Care Research and Quality
http://www.ahrq.gov/

Agency for Toxic Substances and Disease Registry
http://www.atsdr.cdc.gov

Aging
http://www.cdc.gov.nchs.againgact.htm

AIDS Action
http://www.aidsaction.org/

AIDS Drug Assistance Program (ADAP) Monitoring Project
http://www.atdn.org/access/adap

AIDSinfo
http://aidsinfo.nih.gov

The American Foundation for AIDS Research
http://www.amfar.org/index.html

Annual Conference on Tobacco Control
http://www.tobaccocontrolconference.org

Bacteria and Foodborne Illness
http://www.niddk.nih.gov/health/digest/pubs/bacteria/bacteria.htm

Bioterrorism
http://www.bt.cdc.gov

CDC National Center for HIV, STD and TB Prevention -- Divisions of HIV/AIDS Prevention
http://www.cdc.gov/hiv/dhap.htm

CDC National Prevention Information Network
http://www.cdcnpin.org/

Center for AIDS Intervention Research (CAIR)
http://www.cair.mcw.edu/

Center for Food Safety
http://www.centerforfoodsafety.org

Center for Food Safety and Applied Nutrition
http://vm.cfsan.fda.gov/list.html

Centers for Disease Control and Prevention
http://www.cdc.gov/

Centers for Medicare and Medicaid Services
http://www.cms.hhs.gov

Children's Environmental Health Network
http://www.cehn.org

Consumer Product Safety Commission
http://www.cspc.gov

Department of Health and Human Services
http://www.hhs.gov

The Dogwood Center
http://www.dogwoodcenter.org

Environmental Protection Agency
http://www.epa.gov

EveryBody: Preventing HIV and other STDs
http://www.preventaids.net/

Fight Bac!
http://www.fightbac.org

The Florida Tobacco Control Clearinghouse
http://www.ftcc.fsu.edu

Food and Drug Administration
http://www.fda.gov

Food Safety and Foodborne Illness
http://www.who.into/inf_fs/en/fact237.html

Food Safety and Inspection Service
http://www.fsis.usda.gov

Hep C Alert
http://www.hep-c-alert.org

Hepatitis C Vets
http://www.hepcvets.com

HIV Center for Clinical and Behavioral Studies
http://www.hivcenternyc.org/

Imprint Mall
http://www.imprintmall.com/aids

Job Stress Network
http://www.workhealth.org

Maternal and Child Health Bureau, HRSA
http://www.mchb.hrsa.gov/

Mediscover.net
http://www.mediscover.net

MEDLINEplus: Environmental Health
http://www.nlm.nih.gov/medlineplus/environmentalhealth.html

MEDLINEplus: Occupational Health
http://www.nlm.nih.gov/medlineplus/occupationalhealth.html

Mothers Voices
http://www.mvoices.org/

National Highway Traffic Safety Administration (NHTSA)
http://www.nhtsa.dot.gov

National Institute of Environmental Health Sciences
http://www.niehs.nih.gov

National Institute of Occupational Safety and Health
http://www.niosh.gov

National Institutes of Health
http://www.nih.gov

National Library of Medicine
http://www.nlm.nih.gov

Office of Disease Prevention and Health Promotion
http://odphp.osophs.dhhs.gov/

OSHA (Occupational Safety & Health Administration)
http://www.osha.gov

Substance Abuse and Mental Health Services Administration
http://www.samhsa.gov/

Tobacco Information and Prevention Source
http://www.cdc.gov/tobacco/index.htm

United Nations System
http://www.un.org/issues/m-health.asp

US Department of Transportation (DOT)
http://www.dot.gov

USDA Office of Public Health and Science
http://www.fsis.usda.gov/OPHS/ophshome.htm

White House
http://www.whitehouse.gov

World Heath Organization
http://www.who.int

1. CAN WE CAPITALIZE ON THE VIRTUES OF VACCINES? INSIGHTS FROM THE POLIO ERADICATION INITIATIVE

By R. Bruce Aylward and David L. Heymann. American Journal of Public Health, May 2005, pp. 773-777.

Twenty-five years after the eradication of smallpox, the ongoing effort to eradicate poliomyelitis has grown into the largest international health initiative ever undertaken. By 2004, however, the polio eradication effort was threatened by a challenge regularly faced by public health policymakers everywhere -- misperception about the benefits and risks of vaccines. The propagation of false rumors about oral poliovirus vaccine safety led to the reinfection of 13 previously polio-free countries and the largest polio epidemic in Africa in recent years. With deft management of such challenges by local, national, and international health authorities, poliomyelitis, a disease that threatened children everywhere just two generations ago, could soon be relegated to history like smallpox before it.

2. EMERGING INFECTIOUS DISEASES: A 10-YEAR PERSPECTIVE FROM THE NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

By Anthony S. Fauci, Nancy A. Touchette, and Gregory K. Folkers. Emerging Infectious Diseases, April 2005, pp. 519-525.

The authors contend, "Although optimists once imagined that serious infectious disease threats would by now be conquered, newly emerging (e.g., severe acute respiratory syndrome

[SARS]), reemerging (e.g., West Nile virus), and even deliberately disseminated infectious diseases (e.g., anthrax bioterrorism) continue to appear throughout the world. Over the past decade, the global effort to identify and characterize infectious agents, decipher the underlying pathways by which they cause disease, and develop preventive measures and treatments for many of the world's most dangerous pathogens has resulted in considerable progress. Intramural and extramural investigators supported by the National Institute of Allergy and Infectious Diseases (NIAID) have contributed substantially to this effort." This overview highlights selected NIAID-sponsored research advances over the past decade, with a focus on progress in combating HIV/AIDS, malaria, tuberculosis, influenza, SARS, West Nile virus, and potential bioterror agents. Many basic research discoveries have been translated into novel diagnostics, antiviral and antimicrobial compounds, and vaccines, often with extraordinary speed.

3. THE EXTERMINATOR
By Kirsten Weir. Current Science, November 5, 2004, pp. 4-7.

Malaria kills an estimated 2 million people every year, most of them children under age. The article reports that Malaria once infected and killed many people in the United States. By the middle of the 20th century, malaria had been wiped out in the United States, Canada, and northern Europe. But it continues to be a serious health problem in many tropical countries. Roger Bate is one of several health officials now pushing for broader use of DDT (dichlorodiphenyltriddomethme), a chemical that played an important role in kicking malaria out of the United States. INSETS: *Seriously Sick;* and *Killer Genes.*

4. AN HIV VACCINE: AS WE BUILD IT, WILL THEY COME?
By Margaret M. McCluskey, et al. Health Affairs, May/June 2005, pp. 643-651.

Early researchers accurately predicted that AIDS would have a globally destructive impact. However, other experts erroneously believed that they would be able to develop a vaccine against the virus in a relatively short period. More than twenty years later, scientists continue to work to achieve this goal. This paper addresses the unique obstacles faced by HIV vaccine researchers. It concludes with recommendations for how policymakers and public health officials could collaborate with researchers to overcome these obstacles and contribute to the discovery of an HIV vaccine that would save millions of lives.

5. INDIA'S HIV/AIDS CRISIS: A MOMENT OF TRUTH
By Pramit Mitra. SAIS Review, Summer 2004, pp. 55-67.

"Eighteen years ago, the first case of HIV infection was diagnosed in India. Today, this South Asian giant has entered a critical period in its fight against the HlV/AIDS pandemic." This paper is based on the findings and conclusions of a delegation to India in January 2004 from the Center for Strategic & International Studies HIV/AIDS Task Force, "although the country does not have the high prevalence rates that have devastated some African countries, the country's epidemic has started to affect large swathes of the general population in many parts of the country. How India handles this impending development will hold

lessons not only for other 'second wave' countries grappling with the HIV virus, but also its neighbors in South Asia, who share similar socioeconomic characteristics."

6. THE NEXT PANDEMIC?
By Laurie Garrett. Foreign Affairs, July/August 2005, pp. 3-23.

Garrett focuses on the outbreak of avian influenza in Southeast Asia and the threat it poses to global health. It explains the potential for the disease to have as great an impact as the 1918-19 Spanish flu, which killed fifty million people in eighteen months, reviews documented human infections and deaths resulting from avian flu, the danger posed to global health if the virus evolves enough to become capable of human-to-human transmission, unpreparedness of the world's governments for the circumstances of a global pandemic, discusses the Spanish flu outbreak, analyzes avian influenza, and compares potential treatments available in the case of a widespread outbreak among developed and underdeveloped countries.

7. THE NEXT PLAGUE?
By Michael Slenske. Atlantic Monthly, June 2005, pp. 38.

The article focuses on H5N1 avian flu, which, since last December, infected twenty-eight people in Vietnam, killing fourteen. According to Slenske, World Health Organization officials worry that a worldwide outbreak could kill as many as seven million. Human populations have proved particularly susceptible to new flu pandemics every twenty to thirty years, as flu strains mutate and overcome built-up immunities. The article presents information on some noteworthy disease outbreaks through history. Thousands of Philadelphia residents, including U.S. President George Washington, fled their city in 1793, after seeing scores of infected people turn yellow and vomit blood. First identified by health officials in East Asia in February of 1957, Asian flu traveled to the U.S. that summer and spread through classrooms nationwide, even though a vaccine was introduced in August of that year.

8. PREPARING FOR THE NEXT PANDEMIC
By Michael T. Osterholm. Foreign Affairs, July/August 2005, pp. 24-37.

"Dating back to antiquity, influenza pandemics have posed the greatest threat of a worldwide calamity caused by infectious disease. Over the past 300 years, ten influenza pandemics have occurred among humans. The most recent came in 1957-58 and 1968-69, and although several tens of thousands of Americans died in each one, these were considered mild compared to others. The 1918-19 pandemic was not. According to recent analysis, it killed 50 to 100 million people globally. Today, with a world population of 6.5 billion, more than three times that of 1918, even a 'mild' pandemic could kill many millions of people," the author writes. He focuses on the issue of global preparation and readiness in the face of a widespread influenza outbreak and reviews how influenza pandemics have posed the greatest threat of a worldwide calamity. He also reviews what the industrialized world should be doing to prepare for the next influenza pandemic.

9. RURAL DEFINITIONS FOR HEALTH POLICY AND RESEARCH
By L. Gary Hart, Eric H. Larson, and Denise M. Lishner. American Journal of Public Health, July 2005, pp. 1149-1155.

The term "rural" suggests many things to many people, such as agricultural landscapes, isolation, small towns, and low population density. However, defining "rural" for health policy and research purposes requires researchers and policy analysts to specify which aspects of rurality are most relevant to the topic at hand and then select an appropriate definition. Rural and urban taxonomies often do not discuss important demographic, cultural, and economic differences across rural places--differences that have major implications for policy and research. Factors such as geographic scale and region also must be considered. Several useful rural taxonomies are discussed and compared in this article. Careful attention to the definition of "rural" is required for effectively targeting policy and research aimed at improving the health of rural Americans.

10. THE WORST PANDEMIC IN THE HISTORY OF THE WORLD
By John Seffrin. Vital Speeches of the Day, April 1, 2004, pp. 356-360.

Tobacco has emerged as the world's leading killer for several reasons. First, the world is doing a better job of preventing communicable diseases. As a result, non-communicable diseases -- including tobacco-related diseases -- are taking over as the leading threats to life. Second, trade liberalization and globalization have helped tobacco companies to go after previously restricted markets. Tobacco products are treated like any other product when it comes to multinational trade agreements, and that has to change. Third, smoking rates are declining here in the United States and other parts of the less populated developed world, while they are on the rise in the highly populated underdeveloped world. As a result, the industry has dramatically stepped up its efforts in emerging markets in Asia, Africa and Latin America. Today, tobacco is the leading cause of preventable disease and death in the world. This looming tragedy can be headed off if acted upon now.

11. WRONG DOSE
By Adam Graham-Silverman. New Republic, July 4, 2005, pp. 11-13.

This article looks at how the United States Agency for International Development (USAID) is preparing to launch a system for purchasing AIDS drugs and delivering them to two million people by 2008 as part of U.S. President George W. Bush's global AIDS initiative. It also looks at the review of the system's contract, which calls for the delivery of up to seven billion dollars in anti-retroviral drugs and related services, making it the largest procurement contract in USAID history; and bidding partnerships being formed by defense contractors, software firms and shipping giants with nonprofit health and environmental groups.

BUSINESS & ECONOMICS

12. IS TAX REFORM COMING?
By William Tucker. American Enterprise. July/August 2005, pp. 26-29.

Now that President George W. Bush has waded hip-deep into Social Security reform, he is about to take on another hugely ambitious crusade: reforming the tax code. In response to President Bush's upcoming endeavor, Tucker argues that he is not only trying to reduce inefficiency and waste due to complexity in taking on tax reform, but also hopes to attack what many economists consider America's biggest long-term economic problem--inadequate savings and investment. The author also explores the complexities of tax reform and offers other alternatives.

13. THE LINK BETWEEN DIVERSITY AND RESILIENCE
By Patrick Reinmoeller and Nicole van Baardwijk. MIT Sloan Management Review, Summer 2005, pp. 61- 65.

Most agree that innovation ensures superior performance, but there is less agreement on which innovation strategy or strategies best sustain that performance over time -- that is, which lead to resilience. The authors seek to answer that question by analyzing a set of global companies that have successfully adapted to diverse and turbulent changes over a period of two decades, as evidenced by their book value per share, return on assets and sales growth. Among those that sustained superior performance are multinationals such as pharmaceutical, coating and chemical manufacturer Akzo Nobel, electronics company Philips, energy and petrochemical company Shell, consumer goods manufacturer Unilever, life-science products and chemicals manufacturer DSM, multimedia publisher Wolters Kluwers, information and media provider VNU, investment and fund management group Robeco and brewing company Heineken. The research shows that resilient companies continually orchestrate a dynamic balance of four innovation strategies: knowledge management, exploration (internal research and development), cooperation (acquisitions, alliances and other relationships) and entrepreneurship. The authors conclude that focusing on one innovation strategy to the exclusion of others may produce innovation, but it will not lead to resilience.

14. RUNNING IN PACKS TO DEVELOP KNOWLEDGE-INTENSIVE TECHNOLOGIES
By Andrew H. Van de Ven. MIS Quarterly; June 2005, pp. 365-377.

Advances in information technologies and the growth of a knowledge-based service economy are transforming the basis of technological innovation and corporate competition. This transformation requires taking a broader, institutional and political view of information technology and knowledge management. To succeed, firms are advised to focus on building their distinctive competencies, outsource the rest, and become nodes in value chain networks. This shifts the level of competition from between individual firms to between networks of firms, in these networks, individual firms or entrepreneurs seldom have the resources, power, or legitimacy to produce change alone. As a result, "running in packs" is often more successful than "going it alone" to develop and commercialize knowledge-intensive technologies. Many different actors in public and private sectors make important

contributions. These actors do not play impartial roles; instead, they are active participants who become embroiled in diverse, partisan, and embedded issues of innovation development. In this setting, success requires not only technical and rational competence, but also political savvy to understand and mobilize the interests of other players with stakes in an emerging industry.

INTERNATIONAL POLITICAL RELATIONS & SECURITY

15. THE ETHICS OF REALISM

By John C. Hulsman and Anatol Lieven. National Interest, Summer 2005, pp. 37-43.

Hulsman and Lieven discuss the relation between morality and the business of foreign policy. Morality in U.S. foreign policy has long been associated by Americans not only with the means employed by the U.S., but also with the goal of spreading democracy, however, in the years since 9/11, both neoconservatives and Democrat hawks have sought to make specific moral notion the central element of American foreign policy, particularly in the case of the Muslim world.

16. HOW TO THINK ABOUT THE CRUSADES
By Daniel Johnson. Commentary, July/August 2005, pp. 46-51.

Ever since al Qaeda declared war on the West, the Crusades have been forced back into our consciousness as part of a longer historical narrative weighted heavily in favor of Islam. Here, Johnson looks at the condemnation of Christian holy war as the latest substitute for opposing Islamic jihad. He writes, "Condemnation of the Crusades is based on the premise that they were a barbaric, unprovoked war of extermination and conquest, waged against a superior and incomparably more tolerant civilization-in brief, an archetype of Western imperialism. Today, when the very idea of a holy war is utterly alien to Western sensibilities, it is the United States that is identified by its critics, especially in Europe, with the religious fanaticism and military rapacity of the crusaders. The Nobel Prize-winning German novelist Guenter Grass, writing soon after the overthrow of Saddam Hussein, decried the "religious fundamentalism," "moral decline," and "organized madness" of the United States, and proposed that Pope John Paul II, "who knows how lasting and devastating the disasters wrought by the mentality and actions of Christian crusaders have been," issue a formal apology to the Muslim world. Kingdom of Heaven, the Crusade movie by Ridley Scott released in the spring, reflects many of these same attitudes."

DEMOCRACY & HUMAN RIGHTS

17. COUNTDOWN TO A MELTDOWN
By James Fallows. Atlantic Monthly, July/August 2005, pp. 51-62.

Fallows describes the election of 2016 and provides the economic background for the larger themes in the campaign way back 15 years ago. He speaks not just as the campaign manager

but on the basis of friendship and shared efforts these past twenty years. He stresses that the only chance for a new beginning is to make people believe that there actually is a chance. The article presents the Electoral College map drawn up after the 2010 census removed votes from all the familiar blue states except California, giving the Republicans a bigger head start from the Sunbelt states and the South.

18. FOREIGN LAW AND THE U.S. CONSTITUTION
By Kenneth Anderson. Policy Review, June/July 2005, pp. 33-50.

Anderson elaborates on Justice Anthony Kennedy's majority opinion in Roper v. Simmons, which endorsed the use of foreign and international law in U.S. constitutional adjudication, has at least the virtue of putting everyone's cards on the table. Until that decision was handed down (on Mar 1, 2005), it remained possible to view the appearance of foreign law in constitutional decisions as nothing more than a minor hobbyhorse for Justice Stephen Breyer or Justice Kennedy--a merely rhetorical nod in the direction of the mostly Western European judges with whom they have become friends at international judicial conferences and other such venues over the years.

COMMUNICATION & INFORMATION

19. LIBRARIES AND THEIR SERVICE PORTFOLIOS
By Bonnie Burwell and Rebecca Jones. Searcher, June 2005, pp. 32-37.

This article highlights what is happening with service planning in many libraries and information service organizations and examines the potential of applying the portfolio planning process in an information service environment. Portfolio planning aims to enable an organization to view and manage its high-risk or high-growth services with its more conservative offerings, determining which services may not be on track and need help or may need elimination. In essence, portfolio planning provides a holistic view or a vantage point from which librarians can form their service strategy and assess current and future offerings. Some of the best work on portfolio planning has been researched and written by Robert G. Cooper. Although Cooper has found that portfolio methods vary greatly from one organization to another, the main goals of these methods in successful organizations are to maximize the value of services in light of the organization's objectives; balance the service offerings; and align services with organization strategy. Like all processes, portfolio planning involves a series of steps that logically follow a sequential pattern. Steps include reviewing strategic goals, reviewing target client groups, making an inventory of service offerings, identifying client interest and strategic fit of each service, assessing organizational capabilities for each service, mapping the offerings, and discussing, debating, deciding.

20. LIBRARIES AND THEIR SERVICE PORTFOLIOS
By Mark Blitz. Public Interest, Spring 2005, pp. 125-138, 176.

Politically responsible journalism means asking: What does a practically intelligent legislator or executive who is engaged in deliberation about ways and means -- not a curious gossip --

need to know? By seeing things from the public-spirited point of view, the media would go a long way toward ameliorating many of its more harmful excesses. The most politically responsible in the media, those who establish this horizon of public responsibility, will also stand a good chance of being financially responsible, because they will win and hold an influential audience. Anyone is free to join their ranks, or to expose their partisanship masquerading as responsibility, or to compete by being politically one-sided. Still others can follow their lead by addressing important political stories to the most thoughtful in their standard audience, in this way elevating their entire audience. Competition is crucial, of course. But unless certain media institutions take it upon themselves to be politically responsible, the public life will be diminished.

21. SEARCH TOOLS CONVERGE ON THE DESKTOP
By Ron Miller. EContent, May 2005, pp. 24-27.

This article takes a look at issues concerning the emergence of desktop computer search tools. David Burns, CEO at Copernic, believes that the biggest factor that contributed to the flurry of desktop search product releases was the looming shadow of the next release by Microsoft Corporation of Windows, code named Longhorn. Burns says that it is something that is going to get the attention of other major search engines because Web searchers are the bread and butter of Internet companies. Most of these tools are available as a free download, but with pent up consumer demand for functionality, it begs the question of why companies are paying to develop, purchase or license such products but are not charging a fee for the software. It could be a matter of keeping the company brand in front of customers -- a job that is increasingly difficult for companies given the marketing prowess of Google Inc. One of the things that Google does better than any other company is the job of marketing. Google insists that its motivation is not to tap the desktop for keywords but to lead users back to Google.com, where Internet users can conduct Web searches. In fact, the Google indexing tool returns results with the desktop search results at the top of the Results list, with Web results further down.

GLOBAL ISSUES

22. DIESELS VERSUS HYBRIDS: COMPARING THE ENVIRONMENTAL COSTS
By Corinna Kester. World Watch, July/August 2005, pp. 19-21.

Kester examines the entire life-cycle of the diesel-fueled vehicle, including extracting raw materials, manufacturing and assembling automobile components, producing and combusting fuel, and maintaining and disposing of vehicles to measure up their environmental performance. Several differences between diesels and hybrids are undeniable: diesel engines are inherently more efficient than gasoline engines, diesel fuel contains approximately 10% more energy per volume than gasoline, and diesels significantly produce more air pollution.

U.S. SOCIETY, VALUES & POLITICS

23. CAPITALISM, ACADEMIC STYLE, AND SHARED GOVERNANCE
By Gary Rhoades. Academe, May/June 2005, pp. 38-42.

"Restoring higher education's democratic commitment requires more than a restoration of the faculty's internal role in shared governance. It demands an expansion of perspective beyond the academy, and new mechanisms within the academy for democratizing governance," writes the author. Rhoades describes academic capitalism and shared governance in higher education institutions. He claims that restoring the academy's commitment to its democratic responsibilities requires more than restoring the faculty's role in shared governance. It is because academic capitalism and the new economy not only reduce the role of faculty governance but also reorient the purposes of the academy and of faculty and restructure professional employment.

24. CULTIVATING MINDS
By Joel Cohen and David Bloom. Finance & Development, June 2005, pp. 9-14.

The World Bank, UNICEF and UNESCO have estimated that achieving universal primary education by 2015 will cost between $9.1 billion and $35 billion per year, the authors report. But, they note, scarce funds in developing countries have competition from equally compelling needs for spending on development, such as health and physical infrastructure. Additional obstacles to achieving educational goals include economic incentives to keep children out of school; and cultural barriers, particularly for girls and minorities, they say. The authors recommend five steps to improve education for the world's children: clearly defining educational goals based on national, regional and international needs; commitment to improving the effectiveness and economic efficiency of education in achieving those goals; commitment to extending high-quality secondary education to all children; international recognition of the diverse character of educational systems in different countries; and more money and higher priority for education -- especially in the amount of funding from rich countries.

25. THE RICH AND THE REST: THE GROWING CONCENTRATION OF WEALTH
By Sam Pizzigati. Futurist, July/August 2005, pp. 38-44.

A century ago, battles against what angry Americans called plutocracy-rule by the rich-raged all across the United States. Those battles would eventually leave the world's first mass middle class by the 1950s. Today, that plutocracy is back and that middle class is hurting. What about tomorrow? In the twenty-first century, will Americans continue to tolerate enormous disparities in the property people own and the wealth individuals have accumulated?

26. THE WHOLE TRIP: REMEMBERING ROBERT CREELEY
By Anselm Berrigan. Poets & Writers, July/August 2005, pp. 27-29.

"Working until the very end, [Robert Creeley] seemed capable of carrying the entire poetry community on his shoulders while he traveled the world reading, speaking, making new friends -- a talent that never deserted him -- teaching, and acting as ambassador for poetry without pretense." Robert Creeley was the American Studies Bicentennial Chairholder at the University of Helsinki in 1988-89.

SCIENCE & TECHNOLOGY

27. CHALLENGING CONVENTIONAL WISDOM
By Tom Bethell. American Spectator, July/August 2005, pp. 50-53.

The author writes, "Scientists these days tend to believe that almost any trait can be attributed to a gene. The gene obsession, showing up in science journals and on the front page of the *New York Times*, culminated in the Human Genome Project. The human genome was sequenced, then that of the fruit fly, the rat, the mouse, the chimpanzee, the roundworm, yeast, and rice. Computers cranked out their mindless data. It has been a bonanza for techies and the computer industry but the medical benefits have remained elusive." Bethell focuses on the theory that gene mutations cause cancer. He explains efforts of researchers to understand the genetic basis of cancer; role of journalism in the field of medical science; and claims of Robert Weinberg, director of a cancer research laboratory at the Massachusetts Institute of Technology in Cambridge, on the theory.

28. FIXED-MOBILE CONVERGENCE: AN END TO CONFUSION AND COMMODITIZATION?
By Bob Bellman. Business Communications Review, July 2005, pp. 52-57.

Today's telephony infrastructure is a conglomeration of interconnected, overlapping, technologically diverse networks: the PSTN, various cellular networks, PBX-based enterprise networks and the Internet. Fixed-mobile convergence (FMC) promises an end to confusion and top commoditization. If the FMC visions pans out, all phones will access the same voice, data and video services. And in the long-term, FMC will be based on IP Multimedia Subsystem (IMS). To mobilize IP communication, IMS mergers concepts and network elements from the voice over IP and cellular worlds. Still, IMS is a framework, not a service, and subscribers do not sign up for frameworks. Moreover, IMS itself does not deliver fixed-mobile device convergence. So while architects and standards gurus refine the FMC vision, developers are busy inventing new services. It is still early days for fixed-mobile convergence. Time will tell which solutions hold the most value and whether IMS can really stave off network commoditization.